

**NINDS CDE Notice of Copyright
Apathy Scale (AS)**

Availability:	This instrument is not currently available on the NINDS CDE website; however, copyright permission has been granted. If you wish to obtain a copy of the instrument, please submit your request to NINDSCDE@EMMES.com .
Classification:	Core for Huntington's Disease Supplemental for Parkinson's Disease
Short Description of Instrument:	<p>Summary/ Overview of Instrument: The Apathy Scale is an abridged version of the Apathy Evaluation Scale (Marin, 1990). The AS consists of 14 items regarding different dimensions of apathetic behavior. The score for each item ranges from 0 to 3. Rating of each item is based on a semi-structured interview: each question should be read by the examiner, and the patient is provided with the four possible answers.</p> <p>Construct measured: Apathy.</p> <p>Generic vs. disease specific: Generic.</p> <p>Intended use of instrument/ purpose of tool: Assessment of severity.</p> <p>Means of administration: Paper and Pencil.</p> <p>Location of administration: Clinic or at home.</p> <p>Intended respondent: Patient/self and informant.</p> <p># of items: 14.</p> <p># of subscales and names of sub-scales: None.</p> <p>Strengths: This instrument assesses multiple aspects of apathy and has been used in a variety of neuropsychiatric disorders, and allows for comparison between patient/self and informant reports.</p> <p>Weaknesses: The AS may not discriminate apathy from depression.</p> <p>Special Requirements for administration: None.</p> <p>Administration Time: Likely 15-30 minutes.</p> <p>Translations available: Available in English, Dutch, German, French, Spanish and multiple other languages.</p>
Scoring:	<p>Scoring: Ratings should be based on both verbal and non-verbal information of the past 4 weeks (sometimes 2 weeks!). For each item ratings should be judged: 4 possible responses for each question: 'not at all', 'slightly', 'somewhat', 'a lot'. With a cutoff score of 14 points, a sensitivity of 66% and specificity of 100% has been reported in patients with Alzheimer's disease.</p> <p>Standardization of scores to a reference population (z scores, T scores, etc): Not available.</p> <p>If scores have been standardized to a reference population, indicate frame of reference for scoring (general population, HD subjects, other disease groups, etc). Not available.</p>

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Psychometric Properties:	<p>Reliability:</p> <p>Test-retest or intra-interview (within rater) reliability: The AS showed test-retest reliability ($r = 0.90$, $df = 10$, $p < 0.01$) (Starkstein, 1992).</p> <p>Inter-interview (between-rater) reliability: The AS showed good interrater reliability ($r = 0.81$, $df = 10$, $p < 0.01$) (Starkstein, 1992). Inter-interview (between-rater) reliability (as applicable): Interrater agreement for the presence of apathy above a median score in a HD population ranged from poor for the most cognitively impaired subjects to good for the less cognitively impaired subjects (Chatterjee, 2005).</p> <p>Internal consistency: Not available in reviewed references.</p> <p>Statistical methods used to assess reliability: Not available in reviewed references.</p> <p>Validity:</p> <p>Content validity: Not available in reviewed references.</p> <p>Construct validity: Not available in reviewed references.</p> <p>Sensitivity to Change/ Ability to Detect Change (over time or in response to an intervention): Not available in reviewed references.</p> <p>Known Relationships to Other Variables: Subjects with depression score higher on the AS.</p> <p>Diagnostic Sensitivity and Specificity, if applicable (in general population, HD population- premanifest/ manifest, other disease groups): Not available.</p>
References:	<p>Key Reference: Starkstein SE, Mayberg HS, Preziosi TJ, Andrezejewski P, Leiguarda R, Robinson RG: Reliability, validity, and clinical correlates of apathy in Parkinson's disease. J Neuropsychiatry Clin Neurosci 1992; 4: 134-139.</p> <p>Other References:</p> <p>Chatterjee A, Anderson KE, Moskowitz CB, Hauser WA, Marder KS: A comparison of self-report and caregiver assessment of depression, apathy, and irritability in Huntington's disease. J Neuropsychiatry Clin Neurosci 2005; 17: 378-383 [scoring of the IS in this article is incorrect!]</p> <p>Starkstein, SE, Migliorelli R, Manes F, Tesón A, Petracca G, Chemerinski E, Sabe L, Leiguarda R: The prevalence and clinical correlates of apathy and irritability in Alzheimer's disease. Eur J Neurology 1995; 2: 540-546.</p> <p>Leentjens, A.F., et al., Apathy and anhedonia rating scales in Parkinson's disease: critique and recommendations. Mov Disord, 2008. 23(14): p. 2004-14.</p> <p>Marin, R.S., R.C. Biedrzycki, and S. Firinciogullari, Reliability and validity of the Apathy Evaluation Scale. Psychiatry Res, 1991. 38(2): p. 143-62.</p>